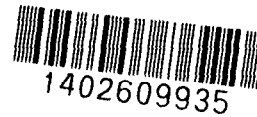


Cranfield School of Management
Cranfield Institute of Technology
Cranfield Bedford MK43 0AL England
Telephone National Bedford (0234) 751122
International +44 234 751122
Telex 826559 CITMAN G
Telefax (0234) 751806



**SWP 3/93 PUSHING ON A STRING: UNCERTAIN OUTCOMES
FROM INTENDED COMPETITIVE STRATEGIES**

DR CLIFF BOWMAN and DAVID FAULKNER
Strategic Management Group

The Cranfield School of Management Working Papers Series has been running since 1987, with approximately 350 papers so far from the seven academic groups of the School: Enterprise; Finance, Accounting and Economics; Human Resources; Information Systems; Marketing and Logistics; Operations Management; and Strategic Management. Since 1992, papers have been reviewed by senior members of faculty before acceptance into the Series. A list since 1991 is included at the back of this paper.

For copies of papers (up to three free, then £2 per copy, cheques to be made payable to the Cranfield School of Management), please contact Mrs Val Singh, Research Administrator, at the above address.

Copyright: Bowman and Faulkner, 1993

ISBN 1 85905 003 4



Synopsis

There are loose linkages between intended competitive strategy and outcomes. This paper explores these linkages by developing two simple matrices: the 'Customer Matrix' and the 'Producer Matrix'. The customer rules a firm's position on the Customer Matrix and ultimately the competition determine the firm's position on the Producer Matrix. Firms must be alert to the connections between these matrices, and the implications of shifting the firm's position in either matrix. Examples from the car industry are used to illustrate some of the issues involved.

**"PUSHING ON A STRING: UNCERTAIN OUTCOMES FROM
INTENDED COMPETITIVE STRATEGIES"**

Actions by the management of a firm may or may not lead to the desired outcomes. This is a particular problem when the intentions behind the actions are concerned with improving the competitive position of the firm. In this paper we set out some basic principles in competitive strategy. We then address the problem of the weak linkages between intentions and outcomes that derive from the uncontrollable aspects of competitive positioning: those that stem from competitor behaviour and those that derive from the behaviour of customers. In many ways this may be likened to pushing on a string.

The competitive position of a firm can usefully be explored by asking the following questions:

1. What is the firm's competitive position?
2. How can the firm's future competitive position be improved?
3. What needs to be done to effect the improvement?

In exploring these questions it is necessary to make clear distinctions between

- (a) the existing situation of the firm, and the desired (or intended) position
- (b) the position of the firm from the consumer's perspective, and that perceived by management within the firm
- (c) improvements to the firm's perceived competitive position, and internal actions designed to effect these improvements

What is the firm's current competitive position?

Some basic points need to be set out about what is meant by 'competitive strategy'.

- (1) Firms compete successfully by offering superior products and services at the market price and/or by charging lower prices for equivalent products.¹
- (2) Competition is acted out through the purchasing behaviour of individual consumers. Therefore the relative competitive position of a firm must be assessed by aggregating the purchasing behaviour of these individuals. This means that the basic unit of analysis should be the individual consumer, not the 'firm'; the 'market' or the 'industry'.

Individuals will have some understanding of their needs. The products* they are aware of may meet these needs, and will be perceived to have various qualities. The criteria used to evaluate these products will be specific to the individual. Product features will be assessed and differentially weighted by different individuals. The perceived bundle of attributes associated with each product will then be weighed against the perceived price charged for each product, and a decision to buy or not to buy will be made. We could represent the relative position of the product perceived to be the possible satisfier of the customer's needs in a diagram like Figure 1. ('The Customer Matrix')²

* When the term product is used it covers service where the firm is a service-providing firm.

(insert Figure 1 about here)

From the perspective of this individual the product in position A* looks unattractive: it is perceived to deliver lower use value, and to be more expensive than its rivals. Of course, the consumer may be entirely 'wrong' in both counts: 'objectively' A may be of superior quality, and the 'cost of ownership' may well work out to be lower than the other four products. But what counts in competitive strategy are not objective 'facts', but subjective perceptions.

Product B looks to be the winner here: it is perceived to offer higher use value, at the lower price. In the absence of product B this individual would then be faced with a choice between C or D. C is seen to be better, but more expensive than D. Here the individual is having to trade off price against perceived use value. We cannot predict in this situation which product would be chosen.

So, to summarise the argument so far:

- (1) Individual consumers define who a firm's competitors are.
- (2) Competitive positioning operates at the level of the individual purchase of single products.

* The letter refers to the position in the matrix occupied by specified products. For ease of reference they will be referred to as for example A or C rather than by the more unwieldy designation "The product in position A or C".

- (3) The perceived use values and prices of those products seen by the individual consumers as potentially meeting their needs are weighted, and a choice is made.

If all consumers had maps like Figure 1 only product B would survive (assuming the firm supplying product B could meet the demand!). For several firms to be operating in a market the maps of other consumers must be different. However, if product B is the market leader, then more individuals would have maps locating product B somewhere in the north west corner of Figure 1 than in other positions, and other players would have to match this offering or fail.

So the competitive battle between firms is played out through the behaviour of individual consumers making single purchase decisions of products. In some markets the competitive battle operates in a way where individual perceptions can be assessed: eg. defence contracting, where defence department purchases account for most of the sales of, say, tanks, and there are only a handful of competing products. But in most markets there are hundreds or thousands of consumers, and there may be scores of firms offering a wide range of products. In order to make sense of these markets some aggregation is required. One way to do this would be to select a typical consumer who we believe is representative of a large group (a true 'segment' of demand). The perceptions of this individual can be used as a proxy for the segment. But this is a dangerous game to play. The temptation may be to make inappropriate assumptions about the number of different segments (over-simplifying the complex patterns of behaviour). But some assumptions must be made to make this type of analysis workable.

How to improve competitive position

The firm that gets to position B (Figure 1) will be the preferred choice of the individual whose perceptions have informed the creation of Figure 1. If this individual is truly representative of a sizeable segment of effective demand, then getting to position B would be one way to beat the competition.

How does a firm improve its competitive position? To be able to compete on price the firm must have lower costs than its competitors. The firm needs to be able to offer superior perceived use value, which implies that the firm needs to know what it is that customers value and be able to provide it.

It may be thought that the firm has greater certainty of affecting perceived price by its actions (eg in raising list price) than it has in increasing PUV. However, there is a clear difference between action to increase price and success in increasing it. A product can only increase price without losing market share if the consumer accepts the increase. If not, the firm has to give back the attempted increase in the form of discounts or rebates if it is not to lose sales. Producers can increase price then ex-ante, but not ex-post. In reality, their operations on list price are no more than attempts to discover what market prices for products really are. Competitive advantage is a buyer determined characteristic, and the actions of the producer can at best attempt to achieve it uncertainly.

Other moves on the chart may lead to improved sales, but only a move to position B will guarantee improvement. For example, a move north would capture sales from customers who are attracted by higher perceived use value at the same prices as the competitor's offerings (position C in Figure 2) but it may not persuade the consumer who is more price sensitive to switch

(position D). If no-one moves north to position C, the firm that moves west to position D will experience an increase in market share, but, again, this manoeuvre may have a reduced impact if another firm moves north to position C.

(insert Figure 2 about here)

So the only move guaranteed to improve market share is a move north west to B. As long as this relative position can be sustained, and as long as it cannot be imitated the move north west to position B is the dominant competitive strategy. Moves to C or D may or may not be successful depending on individual budgetary considerations, whereas a move towards position A by offering less at a high price is clearly a losing strategy.

How do we get to Position B?

Movements in The Customer Matrix (Figure 2) represent shifts in the relative positioning of products as perceived by customers. This describes external positioning and provides two clues about what might be required to get to position B.

1. to move north we need to innovate in ways that add perceived use value (PUV)
2. to move west (cut price) we need to have lower costs than our competitors, or temporarily to be willing to accept a lower margin.

Therefore, to be in a position to attain the north west strategy the firm must develop two internal capabilities:

- (1) innovation
- (2) the lowest delivered cost operation³

To develop those capabilities the firm needs to relate itself to a second matrix, similar to that illustrated in Figure 2, but different in significant ways.

(insert Figure 3 about here)

Figure 2 illustrates what the firm would like to happen in the market place. It can attempt to make movements to some degree along the horizontal perceived price axis, but is in fact effectively constrained by the level of its cost structures. If it is a high cost producer, it cannot compete by moving westwards on the price axis without falling into losses, and inviting damaging retaliation from competitors who have lower cost structures.

Similarly it may wish to move up (or even possibly down) the Perceived Use Value axis, but it cannot do so, unless the potential customer actually credits it with having done so. Adding sophisticated attachments to a product may be unappreciated by the customers, if their perception of value relates to a product that was simple and compact.

The Customer Matrix then can only be influenced by the agreement of the customers. The levers the producer has to pull are at best indirect, and only loosely related to the axes of this matrix. The axes of Figure 3 however are ones that the firm can operate on more directly. They represent the relative levels of innovation and cost. Figure 3 is the Producers' Matrix and

represents a given producer's position in relation to the innovation capability and cost structures of its competitors.

Thus to move north the firm needs to innovate, whether this is by directly "improving" the product, or by adopting other innovatory activities of a marketing or quality kind that are directed towards improving the view the potential customer takes of the firm's product. To move west the firm needs to reduce its overall cost structure, and may indeed aim to become Porter's lowest cost producer.⁴

Pushing on a String

The firm's position in Figure 3 then can be influenced by the management of the firm, and this MAY lead to competitive advantage, but the emphasis must be on the word "may". In a simple illustration, the firm may have accurately assessed what the potential customer values, and therefore has sought to achieve a "realised" strategy of 'cheaper' and 'better' ie to move north west. To do this the firm will carry out activities to move up the innovation axis of Figure 3, and will set in motion efficiency programmes to move west along the horizontal axis. This will, in a successful case, move the product northwards as the Perceived Use Value is increased, and the firm is in a position to move west along the price axis as a result of its activities in lowering costs. Thus it will need to act on Figure 3 in order to be in a position to achieve results in the market place on Figure 2, ie on aspects of the product or service that are visible to the buyer, ie price or PUV.

Thus an understanding of the two matrices is vital to achieving competitive advantage, since their linkage is indirect. Competitive advantage can only

be achieved as a result of movement on the customer's matrix (Figure 2), since that advantage comes at a point of resolution between the buyer's perception of Use Value and of Price. Yet the firm can only act to influence its position in Figure 3, by either increasing innovatory activity in order to attempt to increase PUV, or by lowering its cost structure to put itself in a position to exercise flexibility on price.

The firm can act to affect its position in Figure 3 (the Producer Matrix), but even here the links between intention and outcome are not direct. The management of a firm can really only directly affect internal firm behaviour. They can choose to shift priorities and resources. Decisions can be made to shift attention to cost reduction activities, or to direct more effort to product innovation ie. the management can choose to move priorities away from the current set of priorities.

The connections between the management's decision to increase (or decrease) efforts and movements in the producer matrix depend upon the actions of competitors. It may be that boosting innovation activity would lead to a dramatic shift above the industry average position in the Producer Matrix if the average level of attention to innovation was extremely low in the industry. On the other hand the firm may find that even with a quite substantial boost to innovatory efforts they remain well below the industry average (because such activity has been neglected for too long). The industry averages in the producer matrix are continually shifting as competitors themselves shift their resources and priorities, so an individual firm may find itself have to run hard just to maintain its relative position in the producer matrix.

There is of course yet a further loose linkage in this chain of intentions and outcomes: that being the link between management's signalled priorities and the actual priorities perceived and pursued by the rest of the organisation. This is the well trodden ground of problems of strategy implementation which is not a central concern of this paper, though it clearly adds a further and deeper level of uncertainty into our exploration of the intentions-outcomes relationship.

Illustrations exist therefore where the Customer's Matrix (Figure 2) and the Producer's Matrix (Figure 3) are not in close synchronicity, for example:

1. Innovatory activity may move the firm northwards above the horizontal in the Producer Matrix. However, this could result in movement north, south or no movement at all on the PUV axis of the Customer Matrix, as the would-be customer reacts positively, negatively or not at all to the firm's attempt to improve product PUV.
2. A shift northwards in the Customer Matrix may come about spontaneously due to a change in public tastes, without any innovatory activity at all on the Producer Matrix.
3. The firm may move westward on in the Producer Matrix by reducing its costs, but may judge that market conditions suggest a supply constraint, and may thus opt to increase its margins by raising prices; thus causing an eastward move in the Customer Matrix.
4. Despite a westward move in the Producer Matrix the firm may equally well choose to keep price the same, raise it or lower it.

However, without a significant westward move in the Producer Matrix, it is unlikely to have the freedom to bring about a westward move in the Customer Matrix.

Combining the Customer and Producer Matrices

There are in fact theoretically sixteen possible ways in which a firm's external competitive position (Figure 2) may be linked with its relative internal orientation (Figure 3). We set out below eight of the more likely combinations. In each case the location of the firm (marked 'x') refers to its current position in relation to the industry average. (The industry being defined as those firms who are offering products perceived by the target customers as feasible alternative ways of meeting their needs). The left hand box represents the firm's competitive position on the Customer Matrix, and the right hand one represents the firms internal position relative to the competition on the Producers' Matrix.

In trying to understand the strategic implications of each combination we need to explore both the current situation and the emerging future competitive position of the firm. But the firm can really only try to act in the Producers' Matrix through shifting its own internal priorities. These internal activities may or may not permit or achieve shifts in the Customer Matrix; the links between the two are loose and uncertain at best. Some internal initiatives, for example, to improve the product may have little impact on the firm's position in the Customer Matrix. In this sense, managing the firm's competitive position can be likened to pushing on a string! But the firm's relative industry position in the Producer Matrix, suggests how the position in the Customer Matrix may change in the future.

The firm's priorities today should feed through to influence its future competitive position.

The automobile industry will be used to suggest examples of situations within the customer and producer matrices.

COMBINATION A

(insert Figure 4 about here)

Here the firm is currently enjoying a very strong external position, offering above average PUV at below average prices. This external position is sustained and supported by a strong relative cost position, and above average commitment to innovation. Our prognosis for this firm's future looks good: it should be able to sustain its powerful competitive position. The position of Toyota's Lexus in the luxury car market probably reflects Combination A. Toyota's low cost position (achieved through continual learning and process improvements in the mid-market segments of the industry) has enabled them to challenge Mercedes and BMW. By thoroughly researching the dimensions of perceived use value that are important to their target customers they have been able to develop a product that meets customer needs. Moreover, by truly understanding what is valued they can dispense with product features that do not significantly feed through to higher PUV. For example, only one version of the Lexus (the LS400) is sold in the UK but it represents an impressive package of features; the cost advantages of focussing on just one version are clear.

COMBINATION B

(insert Figure 5 about here)

Low prices and below average PUV are represented in combination B. Here the firm is opting for a 'down market' position. The internal activity is directed essentially at cost reduction, not at innovation. This may be sustainable, but if other firms translate their innovatory activity into higher PUVs then the average PUV in the industry will be levered upwards, leaving this firm with product with very low relative perceived use value. Low costs would then be essential to sustain the very low prices needed to persuade buyers to forego the PUV benefits offered by the competition. The Proton car brand is probably in this position, especially with its existing Malaysian government cost subsidy. It may be necessary for Proton to focus more attention on product development ie. innovation to prevent them being left behind as other players continue to push the average acceptable 'package' of PUVs northwards.

COMBINATION C

(insert Figure 6 about here)

In this example the firm offers higher PUV and commands a price premium. This is supported by high innovation activity to sustain the above average PUV position as competitors imitate or innovate. However this 'natural' strategy (Porter's 'Differentiation' strategy) results in the firm having above average costs. The price premium can only be sustained if other firms are unable to move north through valued innovations. If they continue north, and if their relative cost position is better than the 'Differentiator' then they will be able to compete on price. Thus the sustainability of the high relative cost position depends on the extent to which other firms are prevented from moving north. The 'Differentiator' needs strong barriers to imitation.

BMW are probably in this position. Competing in an 'up market' segment does not insulate the firm from price competition. As we have seen, Lexus has been able to compete head-on with BMW offering an extremely attractive product at lower prices. Whereas the BMW 'brand' may provide some protection, this barrier to direct competition can be easily eroded as it is essentially an intangible advantage. If BMW start to compromise on quality (particularly in easily perceived areas, like the fit of internal trim) the brand can be rapidly devalued. If the brand has provided protection from price competition this may have reduced pressures to control costs in the past. The investments in learning and process development that corporations like Honda, Nissan and Toyota have been making over the past 20 years cannot easily be imitated. So a potentially dangerous cycle may emerge at BMW: price competition leads to quality compromises (as BMW struggles to cut costs to match lower prices); quality reductions impact on the 'Brand', thus lowering perceived use value; this leads to more price cutting to preserve market share etc.

COMBINATION D

(insert Figure 7 about here)

The company has managed to combine a highly innovative position with a low cost one, probably as the innovative activity has led to the development of new lower cost technology. The market however will support higher prices for the accepted increased PUV and the company takes advantage of this by increasing its prices and margins-a very enviable position to be in. The new MG about to be re-launched may well be in this position. It has the benefit of modern efficient technology, and is being marketed at the

premium price of £27,000. Whilst the 'classic' perceived benefits remain, the company will be able to reap high margins.

COMBINATION E

(insert Figure 8 about here)

As in Combination A, the firm has a very strong external competitive position with a high PUV. However, current profitability will be low and the future position of the firm may be jeopardised because of its high relative cost position and its inability to command high prices. This firm is unable to manage innovation and costs simultaneously. Low margins will result from the combination of above average costs and below average prices. Price increases would help to alleviate the profits squeeze. If this is not achieved then the firm may find it increasingly difficult to devote adequate resources to innovation activity.

Morgan, the speciality sports car manufacturer may be in this position. In the eyes of enthusiasts the cars are very appealing (high PUV), but a combination of the company's philosophy and the small size of the market have resulted in a policy of charging relatively low prices. Of course, a lack of product "innovation" is part of the appeal of the cars, so this may well not jeopardise the cars' PUV. However, as more potential customers come to expect certain levels of engineering sophistication (even in cars that look like something from 1935) the market for a really basic vehicle may continue to decline. Small scale manufacturer may result in significant cost penalties. This becomes an issue when Morgan are compared with other manufacturers who are perceived by potential customers as offering viable alternatives for example the Mazda MX-5.

COMBINATION F

(insert Figure 9 about here)

Again, as with Combination B, the firm is offering low prices at below average PUV. However, the cost situation is above average, and there is below average innovation activity. This situation may be the result of poor strategic management in the past: the firm has had to reactively compete on price because it has been unable (or unwilling) to invest in product innovation. A lack of management effort and initiative may also have caused the firm to have a high relative cost position (or there may be structural or locational disadvantages that have led to the high cost position). The future looks bleak, if not non-existent. Low to zero profits, no funds for innovation, or for radical initiatives to cut costs.

Although Lada cars are priced very competitively in the UK they are probably perceived to offer below average PUV. The low price position is only sustainable as a result of low wage costs in Russia and exchange rate anomalies. The labour productivity of the Lada factories is low, hence their ability to compete in Western markets relies almost entirely on these wages and currency anomalies.

COMBINATION G

(insert Figure 10 about here)

The internal situation of low innovation and high costs have led to the presentation to the market of a high priced product with low perceived use

value. In the situation of monopoly, cartel, or supply constraint the company may survive, but the combination is not sustainable if genuine competition operates. Rover faced this situation before their alliance with Honda. However the alliance enabled them to increase their level of innovation by sharing the cost and technology with Honda, and the market appreciated this and conceded an increased PUV.

COMBINATION H

(insert Figure 11 about here)

This combination illustrates an external situation of high PUV and high Price, but a corresponding internal situation of high cost and low innovation. This is unlikely to be sustainable since customers will come to expect a high level of innovatory specification if they are to pay high prices. A competitor able to offer the results of high innovatory activities may be a considerable threat.

Rolls Royce cars are currently facing this dilemma in competing, in particular, with the top range of Mercedes. Unless Rolls Royce are able to enhance the technological sophistication of their cars, they are bound to face a falling relative PUV position.

Summary

Movement in the Producer Matrix, then, may or may not bring about its intended outcome on the external market. Failure to do so may result from a number of factors eg:

1. Exogenous changes in market demand, eg changes in taste.
2. Failure to link innovation to an increase in PUV, through accurate market research or business intuition.
3. Strong demand that enables higher prices to be charged than are justified by cost structures.
4. Failure of the competition to put sufficient pressure on the firm to charge 'competitive' prices.
5. Poor marketing leading improved innovation not to be translated into PUV.

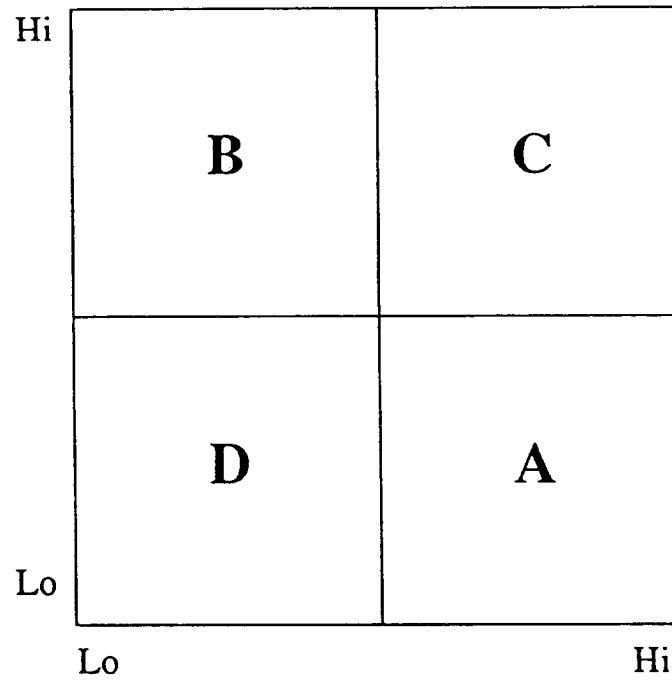
Any one, or a combination of the above factors may lead to a failure of appropriate action within the company to lead to the elusive sustainable competitive advantage, since this is uniquely within the gift of the consumer.

To try to "stiffen the string", to make the connections between intentions and outcomes more direct, the management of the firm needs to have excellent information about their relative cost and innovation standing in the industry, and they need to really understand what customers value. Without this information decisions are being taken blindly which greatly increases the uncertainty of outcomes in the only matrix that ultimately matters: the customer's.

References

1. Mathur, S. S. 1988 'How firms compete: a New Classification of Generic Strategies', Journal of General Management, Vol. 14, No. 1, pp. 30-60.
2. Bowman, C. 1992 'Charting Competitive Strategy' in 'The Challenge of Strategic Management', (eds. David Faulkner and Gerry Johnson) Kogan Page, London 1992.
3. Faulkner, D., and Bowman, C. 1993 'Generic Strategies and Congruent Organisational Structures - Some Suggestions', European Management Journal, Dec. 1992.
4. Porter, M. 1980 'Competitive Strategy', Free Press, New York.

Perceived
Use Value



Perceived
Price

Figure 1 'The Customer Matrix'

PUV

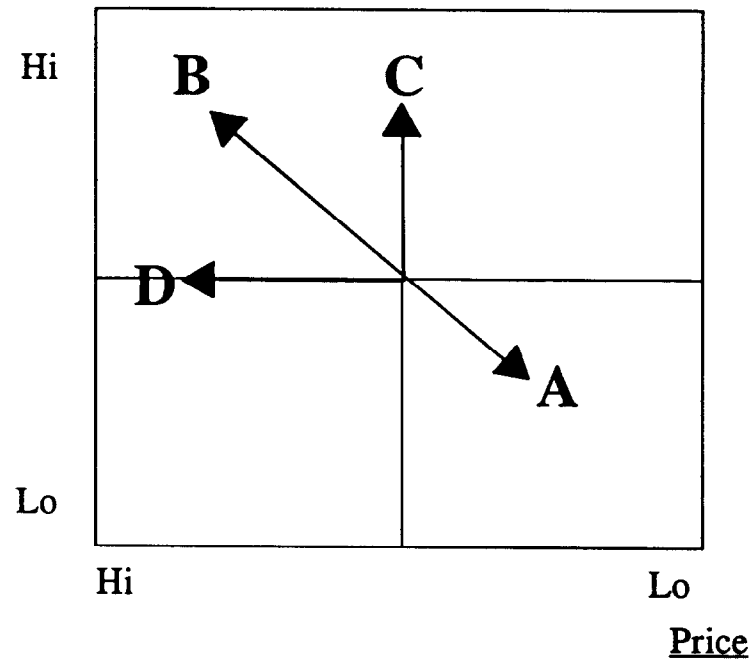
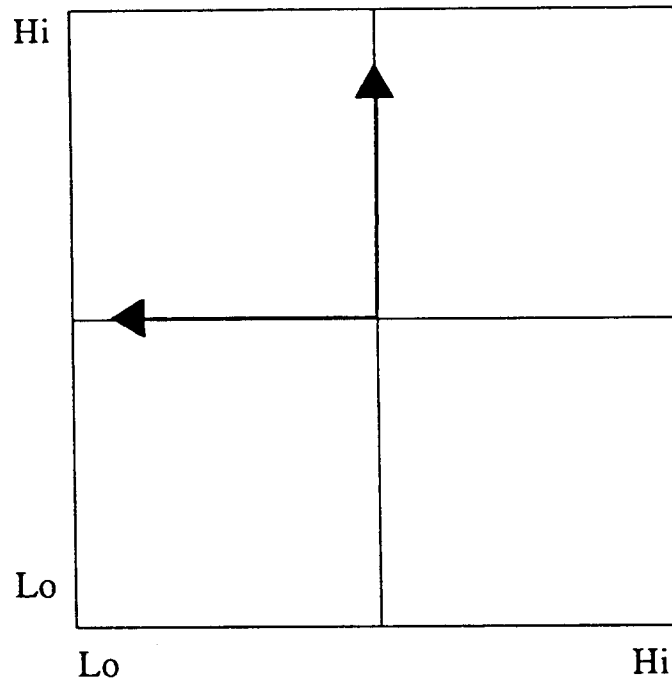


Figure 2 Moves in the Customer Matrix

Innovation



Costs

Figure 3 'The Producer Matrix'

Figure 4 Combination A

Hi	X	
PUV		
Lo		
	Lo	Hi

Hi	X	
Innovation		
Lo		
	Lo	Hi

Figure 5 Combination B

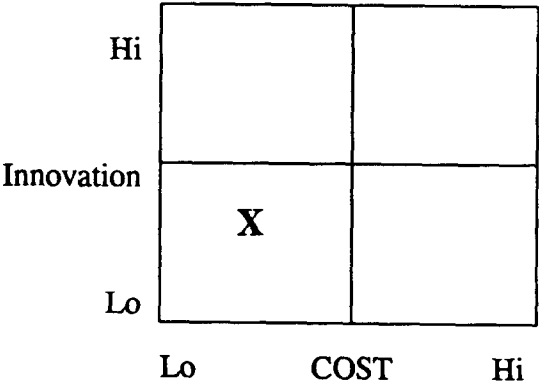
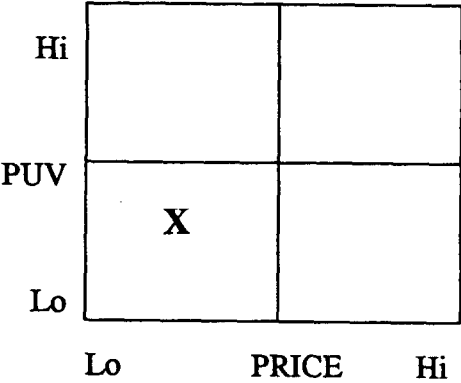


Figure 6 Combination C

Hi		X
PUV		
Lo		
	Lo	Hi

PRICE

Hi		X
Innovation		
Lo		
	Lo	Hi

COST

Figure 7 Combination D

Hi		X
PUV		
Lo		
	Lo	Hi

Hi	X	
Innovation		
Lo		
	Lo	Hi

Figure 8 Combination E

Hi	X	
PUV		
Lo		
	Lo	Hi

PRICE

Hi		
Innovation		X
Lo		
	Lo	Hi

COST

Figure 9 Combination F

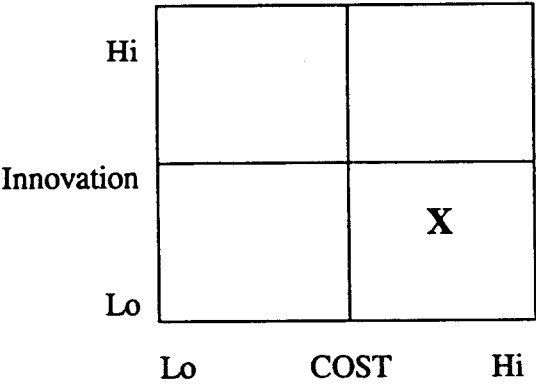
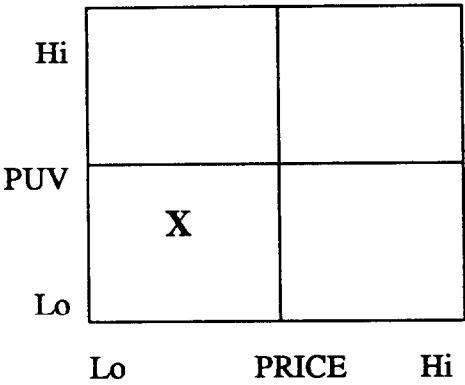


Figure 10 Combination G

Hi		
PUV		X
Lo		
	Lo	Hi

PRICE

Hi		
Innovation		X
Lo		
	Lo	Hi

COST

Figure 11 Combination H

Hi		X
PUV		
Lo		
	Lo	Hi

PRICE

Hi		
Innovation		X
Lo		
	Lo	Hi

COST

DAVID FAULKNER MA BSc (ECON) MIMC

Lecturer in Strategic Management

David Faulkner has a strong background of many years of management consultancy. Particularly notable are his seven years at McKinsey and Co Inc, where he ran projects such as the re-organisation of the Government of Tanzania and the creation of Lloyds Bank International. During his time as head of Strategy Consulting at Arthur D Little he led the studies to redevelop the Scottish Engineering industry and to reorganise the Wellcome Foundation.

He has considerable experience in the financial services industry. Subsequent to his work at Lloyds Bank International, he became Director of Strategic Planning at the Charterhouse Group.

More recently he has conducted major strategy consulting projects largely associated with the Single European Market for Pearl Assurance, and for General Accident.

At Cranfield he lectures to and conducts strategy workshops for major 'big six' accounting and consultancy firms, and lectures on strategy on public programmes like the General Management Programme for functional specialists and the Chief Executives Programme. He also teaches on the strategy modules of the MBA.

He also lectures on in-house programmes to major industrial and financial services companies, and in addition runs his own Strategic Consultancy Company.

He is currently conducting Doctoral research into cross-border strategic alliances at Oxford University. He has a MA in Politics, Philosophy and Economics from Oxford and a BSc(Econ) from London University. He is a member of the Institute of Management Consultants.

CLIFF BOWMAN BA MBA PhD

Lecturer in Strategic Management

After graduating, Cliff joined Shell UK in a marketing function. He then moved to the UK Civil Aviation Authority as an economist, where he worked in airport planning and airline economics.

Since 1979, he has been engaged in management development. Before joining Cranfield, he was Head of the School of Business at Humberside College of Higher Education. He has undertaken consultancy and management development work for a wide range of private and public sector organisations. Books he has published are 'Strategic Management' (MacMillan 1987), and 'Management in Practice' (Heinemann 1987) and readings in Strategic Management (MacMillan 1989). His latest book "The Essence of Strategic Management" was published in October 1990 by Prentice Hall.

Current research interests are centred on managers' perceptions of their firm's strategies.

**CRANFIELD SCHOOL OF MANAGEMENT
WORKING PAPER SERIES
List No 5, 1991**

- SWP 1/91 Colin Barrow
"How Green are Small Companies? A Survey
by Cranfield School of Management"
- SWP 2/91 Graham Clark
"Strategies for Product and Customer Support
- A Research Report"
- SWP 3/91 David Parker
"Tackling Tax Evasion in the UK"
- SWP 4/91 John McGee and Susan Segal-Horn
"Strategic Space and Industry Dynamics: The
Implications for International Marketing
Strategy"
- SWP 5/91 Chris Brewster
"Culture: The International Dimension"
- SWP 6/91 Chris Brewster and Helen Peck
"Management Changes in China and Eastern
Europe: Dubious Parallels"
- SWP 7/91 Keith Ward, Sri Srikanthan, Richard Neal
"Marketing Investment Analysis: The Critical
Success Factors for Financially Evaluation and
Effectively Controlling Marketing Investment
Decisions."
- SWP 8/91 Andy Bytheway and Bernard Dyer
"Electronic Data Interchange: Persuading
Senior Management"
- SWP 9/91 Alan Warr
"Strategic Opportunities and Information
Systems Management"
- SWP 10/91 Alan Warr
"Bridging the Gap - Implementing Information
Systems Strategies"
- SWP 11/91 Alan Warr
"Mapping the Applications Portfolio onto the
Projects Portfolio"
- SWP 12/91 Siobhan Alderson & Andrew Kakabadse
"The Top Executive Competencies Survey - A
Literature Review"
- SWP 13/91 Mike Sweeney
"Determining a Technology Strategy for
Competitive Advantage"
- SWP 14/91 Len Holden and Helen Peck
"Bulgaria, Perestroika, Glasnost and
Management"
- SWP 15/91 Robert Brown & Andy Burnett
"Do we need Enterprising Graduates?"
- SWP 16/91 Ian Oram & Clare Tagg
"Using an IS Strategic Model to give a
Strategy for Teaching IS"
- SWP 17/91 Len Holden
"Employee Communications in Europe"
- SWP 18/91 Susan Segal-Horn
"The Globalisation of Service Industries"
- SWP 19/91 David Ballantyne
"Coming to Grips with Service Intangibles,
using Quality Management Techniques"
- SWP 20/91 Colin Armistead
"Resource Productivity in the Services Sector"
- SWP 21/91 David Parker & John Burton
"Rolling back the State? : UK Tax and
Government Spending Changes in the 1980s"
- SWP 22/91 Simon Knox & David Walker
"Involvement, Cognitive Structures and Brand
Loyalty: The Empirical Foundations for a
Unifying Theory"
- SWP 23/91 David Ballantyne
"Internal Marketing, Collaboration and
Motivation in Service Quality Management"
- SWP 24/91 Chris Brewster
"Starting again: Industrial Relations in
Czechoslovakia"
- SWP 25/91 Cliff Bowman & Gerry Johnson
"Surfacing Managerial Patterns of Competitive
Strategy: Interventions in Strategy Debates"
- SWP 26/91 Malcolm Harper
"Cooperatives and Other Group Enterprises:
What are the Critical Factors for Success? A
Survey of Informed Opinion."
- SWP 27/91 Mike Sweeney
"The Strategic Management of Manufacturing:
From Waste to Haste"
- SWP 28/91 Mike Sweeney
"How to Achieve Competitive Edge by
Simultaneous Process Engineering"
- SWP 29/91 Mike Sweeney
"Towards a Unified Theory of Strategic
Manufacturing Management"

- SWP 30/91 David Ballantyne, Martin Christopher & Adrian Payne
"The Pathology of Company-Wide Quality Initiatives: Seven Prescriptions for Failure"
- SWP 31/91 Martin Christopher, Adrian Payne & David Ballantyne
"Relationship Marketing: Bringing Quality, Customer Service and Marketing Together"
- SWP 32/91 Mike Fleming & Joe Nellis
"The Development of Standardised Indices for Measuring House Price Inflation Incorporating Physical and Locational Characteristics"
- SWP 33/91 Cliff Bowman
"Charting Competitive Strategy"
- SWP 34/91 Roland Calori, Gerry Johnson & Philippe Sarnin
"French and British Top Managers' Understanding of the Structure and the Dynamics of their Industries: A Cognitive Analysis and Comparison"
- SWP 35/91 Michael Sweeney
"Manufacturing-Led Competitiveness: Use Maths not Myths"
- SWP 36/91 Robert Brown, Andrew Norton & Bill O'Rourke
"Case Study - Beverley plc"
- SWP 37/91 Malcolm Harper & John Hailey
"Management Development for Enterprise Promotion: Non-Governmental Organisations and the Development of Income Generating Enterprise"
- SWP 38/91 Shaun Tyson & Noeleen Doherty
"The Redundant Executive: Personality and the Job Change Experience"
- SWP 39/91 Yochanan Altman
"On Managing Volunteers - Absence of Monetary Compensation and its Implication on Managing Voluntary Organisations: The Issues of Motivation, Control and Organisational Structure."
- SWP 40/91 David Parker
"Privatisation Ten Years On: A Critical Analysis of its Rationale and Results."
- SWP 41/91 Ian Oram
"Implications of an IS Strategic Model for IS Development"
- SWP 42/91 Shaun Tyson
"1992: An Investigation of Strategies for Management Development"
- SWP 43/91 Malcolm McDonald
"The Changing Face of Marketing"
- SWP 44/91 Malcolm McDonald
"Teaching by Degrees"
- SWP 45/91 Malcolm McDonald & John Leppard
"Marketing Planning and Corporate Culture"
- SWP 46/91 Colin Barrow & Andy Burnett
"The Single Market and Small Growing Companies in the UK: A Survey by Cranfield School of Management"
- SWP 47/91 Colin Barrow
"Key Staff Recruitment in Small Firms in the UK: A Survey by Cranfield School of Management"
- SWP 48/91 Yochanan Altman
"Organisational Consultancy and Clinical Psychology - The Meeting of Two Worlds"
- SWP 49/91 John Hailey & Jon Westborg
"A New Role for Development Agencies: Non-Government Organisations and Enterprise Development"
- SWP 50/91 Paul Burns & Christine Choisine
"The Attitudes of Small and Medium-Sized Companies in Britain and France to the Business Environment in the First Half of 1991"
- SWP 51/91 Paul Burns
"The European Market"
- SWP 52/91 Shailendra Vyakarnam
"The Mismatch between Academic and Practitioner Constructs of Ethics : Implications for Business Schools"
- SWP 53/91 Cliff Bowman
"Managerial Perceptions of Porter's Generic Strategies"
- SWP 54/91 Adrian Payne and Flemming Poufelt
"Increasing the Effectiveness of Mergers and Acquisitions within the Management Consulting Industry"
- SWP 55/91 John Hailey
"The Small Business Sector in Developing Economies"

SWP 56/91 Colin Armistead & Graham Clark
"Capacity Management in Services and the
Influence on Quality and Productivity
Performance"

SWP 57/91 Colin New
"World Class Manufacturing versus Strategic
Trade Offs"

SWP 58/91 Colin Armistead & John Mapes
"Supply Networks and the Changing Role of
Operations Managers"

SWP 59/91 Brett Collins & Adrian Payne
"Internal Services Marketing"

SWP 60/91 Andrew Myers, Mairi Bryce & Andrew
Kakabadse
"Business Success and 1992: The Need for
Effective Top Teams"

SWP 61/91 Malcolm McDonald
"Strategic Marketing Planning: A State of the
Art Review"

SWP 62/91 Malcolm McDonald
"Excellent Selling can Seriously Damage a
Company's Health"

SWP 63/91 Graham Clark & Colin Armistead
"After Sales Support Strategy: A Research
Agenda"

SWP 64/91 Graham Clark & Colin Armistead
"Barriers to Service Quality: The Capacity,
Quality, Productivity Balance"

SWP 65/91 Ariane Hegewisch
"European Comparisons in Rewards Policies:
The Findings of the First Price
Waterhouse/Cranfield Survey"

SWP 66/91 Andy Bailey & Gerry Johnson
"Perspectives of the Process of Strategic
Decision-Making"

SWP 67/91 Collin Randlesome
"East German Managers - From Karl Marx to
Adam Smith?"

SWP 68/91 Paul Burns & Christine Choisne
"High Performance SMEs: A Two Country
Study"

SWP 69/91 David Parker
"Ownership, Managerial Changes and
Performance"

SWP 70/91 Graham Elkin (Visiting Fellow)
"Socialisation and Executive MBA
Programmes"

SWP 71/91 Shai Vyakarnam
"The New Europe from the Third World"

SWP 72/91 John Hailey
"Small Business Development in the
Developing World: An Overview of
Contemporary Issues in Enterprise
Development"

SWP 73/91 Paul Burns
"Training Within Small Firms"

SWP 74/91 Paul Burns & Christine Choisne
"High Performance SMEs in Britain and
France: Strategies and Structures"

SWP 75/91 Robert Brown et al
"UK Tax Implications for the Small Business"

SCHOOL WORKING PAPERS LIST NO 6, 1992

SWP 1/92 Mike Sweeney
"How to perform simultaneous process
engineering"

SWP 2/92 Paul Burns
"The Management of General Practice"

SWP 3/92 Paul Burns
"Management in General Practice: A Selection
of Articles"

SWP 4/92 Simon Knox & David Walker
"Consumer involvement with grocery brands"

SWP 5/92 Deborah Helman and Adrian Payne
"Internal marketing: myth versus reality?"

SWP 6/92 Leslie de Chernatony and Simon Knox
"Brand price recall and the implications for
pricing research"

SWP 7/92 Shai Vyakarnam
"Social Responsibility in the UK Top 100
Companies"

SWP 8/92 Susan Baker, Dr Simon Knox and Dr Leslie
de Chernatony
"Product Attributes and Personal Values: A
Review of Means-End Theory and Consumer
Behaviour"

- SWP 9/92 Mark Jenkins
"Making Sense of Markets: A Proposed Research Agenda"
- SWP 10/92 Michael T Sweeney and Ian Oram
"Information Technology for Management Education: The Benefits and Barriers"
- SWP 11/92 Keith E Thompson (Silsoe College)
"International Competitiveness and British Industry post-1992. With Special Reference to the Food Industry"
- SWP 12/92 Keith Thompson (Silsoe College)
"The Response of British Supermarket Companies to the Internationalisation of the Retail Grocery Industry"
- SWP 13/92 Richard Kay
"The Metaphors of the Voluntary/Non-Profit Sector Organising"
- SWP 14/92 Robert Brown and Philip Poh
"Aniko Jewellers Private Limited - Case Study and Teaching Notes"
- SWP 15/92 Mark Jenkins and Gerry Johnson
"Representing Managerial Cognition: The Case for an Integrated Approach"
- SWP 16/92 Paul Burns
"Training across Europe: A Survey of Small and Medium-Sized Companies in Five European Countries"
- SWP 17/92 Chris Brewster and Henrik Holt Larsen
"Human Resource Management in Europe - Evidence from Ten Countries"
- SWP 18/92 Lawrence Cummings
"Customer Demand for 'Total Logistics Management' - Myth or Reality?"
- SWP 19/92 Ariane Hegewisch and Irene Bruegel
"Flexibilisation and Part-time Work in Europe"
- SWP 20/92 Kevin Daniels and Andrew Guppy
"Control, Information Seeking Preference, Occupational Stressors and Psychological Well-being"
- SWP 21/92 Kevin Daniels and Andrew Guppy
"Stress and Well-Being in British University Staff"
- SWP 22/92 Colin Armistead and Graham Clark
"The Value Chain in Service Operations Strategy"
- SWP 23/92 David Parker
"Nationalisation, Privatisation, and Agency Status within Government: Testing for the Importance of Ownership"
- SWP 24/92 John Ward
"Assessing and Managing the Risks of IS/IT Investments"
- SWP 25/92 Robert Brown
"Stapleford Park: Case Study and Teaching Notes"
- SWP 26/92 Paul Burns & Jean Harrison
"Management in General Practice - 2"
- SWP 27/92 Paul Burns & Jean Harrison
"Management in General Practice - 3"
- SWP 28/92 Kevin Daniels, Leslie de Chernatony & Gerry Johnson
"Theoretical and Methodological Issues concerning Managers' Mental Models of Competitive Industry Structures"
- SWP 29/92 Malcolm Harper and Alison Rieple
"Ex-Offenders and Enterprise"
- SWP 30/92 Colin Armistead and Graham Clark
"Service Quality: The Role of Capacity Management"
- SWP 31/92 Kevin Daniels and Andrew Guppy
"Stress, Social Support and Psychological Well-Being in British Chartered Accountants"
- SWP 32/92 Kevin Daniels and Andrew Guppy
"The Dimensionality and Well-Being Correlates of Work Locus of Control"
- SWP 33/92 David Ballantyne, Martin Christopher, Adrian Payne and Moira Clark
"The Changing Face of Service Quality Management"
- SWP 34/92 Chris Brewster
"Choosing to Adjust: UK and Swedish Expatriates in Sweden and the UK"
- SWP 35/92 Robert Brown, with Peter Cook et al
"Goldsmiths Fine Foods - Case Study and Teaching Notes"
- SWP 36/92 Mike Sweeney
"Strategic Manufacturing Management: Restructuring Wasteful Production to World Class"

SWP 37/92 Andy Bailey & Gerry Johnson
"An Integrated Exploration of Strategic
Decision-Making"

SWP 5/93 Kevin Daniels, Leslie de Chernatony &
Gerry Johnson
"Validating a Method for Mapping Managers'
Mental Models of Competitive Industry
Structures"

SWP 38/92 Chris Brewster
"European Human Resource Management:
Reflection of, or Challenge to, the American
Concept"

SWP 39/92 Ute Hanel, Kurt Volker, Ariane Hegewisch
and Chris Brewster
"Personnel Management in East Germany"

SWP 40/92 Lawrence Cummings
"Logistics goes Global - The Role of Providers
and Users"

SWP 41/91 Roger Seaton & Martin Cordey-Hayes
"Interactive Models of Industrial Technology
Transfer: A Process Approach"

SWP 42/92 Susan Segal-Horn
"The Logic of International Growth for
Service Firms"

SWP 43/92 Mike Sweeney
"Benchmarking for Strategic Manufacturing
Management"

SWP 44/92 Paul Burns
"Financing SMEs in Europe: A Five Country
Study"

SWP 45/92 Robert Brown
"The Graduate Enterprise Programme - Has it
been Worthwhile?"

CRANFIELD WORKING PAPERS **List No 7, 1993**

SWP 1/93 John Mapes
"The Effect of Limited Production Capacity on
Safety Stock Requirements for Periodic
Review Inventory Systems"

SWP 2/93 Shai Vyakarnam & Alison Rieple
"Corporate Entrepreneurship: A Review"

SWP 3/93 Cliff Bowman & David Faulkner
"Pushing on a String: Uncertain Outcomes
from Intended Competitive Strategies"

SWP 4/93 Susan Baker & Mark Jenkins
"The Role of Values in the Design and
Conduct of Management Research:
Perspectives on Managerial and Consumer
Cognition"

SWP 37/92 Andy Bailey & Gerry Johnson
"An Integrated Exploration of Strategic
Decision-Making"

SWP 38/92 Chris Brewster
"European Human Resource Management:
Reflection of, or Challenge to, the American
Concept"

SWP 39/92 Ute Hanel, Kurt Volker, Ariane Hegewisch
and Chris Brewster
"Personnel Management in East Germany"

SWP 40/92 Lawrence Cummings
"Logistics goes Global - The Role of Providers
and Users"

SWP 41/91 Roger Seaton & Martin Cordey-Hayes
"Interactive Models of Industrial Technology
Transfer: A Process Approach"

SWP 42/92 Susan Segal-Horn
"The Logic of International Growth for
Service Firms"

SWP 43/92 Mike Sweeney
"Benchmarking for Strategic Manufacturing
Management"

SWP 44/92 Paul Burns
"Financing SMEs in Europe: A Five Country
Study"

SWP 45/92 Robert Brown
"The Graduate Enterprise Programme - Has it
been Worthwhile?"

SWP 5/93 Kevin Daniels, Leslie de Chernatony &
Gerry Johnson
"Validating a Method for Mapping Managers'
Mental Models of Competitive Industry
Structures"

CRANFIELD WORKING PAPERS **List No 7, 1993**

SWP 1/93 John Mapes
"The Effect of Limited Production Capacity on
Safety Stock Requirements for Periodic
Review Inventory Systems"

SWP 2/93 Shai Vyakarnam & Alison Rieple
"Corporate Entrepreneurship: A Review"

SWP 3/93 Cliff Bowman & David Faulkner
"Pushing on a String: Uncertain Outcomes
from Intended Competitive Strategies"

SWP 4/93 Susan Baker & Mark Jenkins
"The Role of Values in the Design and
Conduct of Management Research:
Perspectives on Managerial and Consumer
Cognition"